What is claimed is:

1   1.   A method comprising:

2   receiving a message, the message comprising header information and data

3   descriptors about data that is transmitted with the header information;

4   obtaining the data from a host, said host remotely disposed with respect to an

5   input/output (I/O) processor;

6   inserting the data in the message; and

7   sending the message toward its destination.

1   2.   The method of claim 1 wherein the header information comprises header

2   descriptors for a transmission control protocol/internet protocol (TCP/IP) header.

1   3.   The method of claim 2 wherein the header information is obtained from local

2   I/O memory using the header descriptors.

1   4.   The method of claim 1 wherein the data descriptors define at least the type of

2   data, the amount of data and the location of the data in the message.

1   5.   The method of claim 1 wherein obtaining the data from the host comprises

2   using the data descriptors to obtain the data from a host that is remotely disposed with

3   the I/O processor via a bus.

1   6.   The method of claim 5 wherein the bus is at least one of a peripheral component

2   interconnect (PCI) bus, an EISA bus and a PCIX bus.

1   7.   The method of claim 1 wherein obtaining the data from the host comprises

2   obtaining the data from the host via a direct memory access (DMA) cycle.

1   8.   The method of claim 1 wherein the message is received by any one of a network

2   interface card, and an intermediate software module locally disposed with respect to the

3   I/O processor.

1   9.   The method of claim 1 wherein obtaining the data from the host comprises

2   receiving the data via a PCI to PCI bridge.

1   10.   A computer system comprising:

2   a bus communicatively coupled with a host;

3   an I/O processor communicatively coupled with the bus and an I/O module;

4   a network interface card (NIC) communicatively coupled with the processor said NIC

5   to

6   receive a message, the message comprising header information and data

7   descriptors about data that is transmitted with the header information;

8   obtain the data from a host, said host remotely disposed with respect to an

9   input/output (I/O) processor;

10   insert the data in the message; and

11   send the message toward its destination.

1   11.   The apparatus of claim 10 wherein the header information comprises header

2   descriptors for a transmission control protocol/internet protocol (TCP/IP) header.

1   12.   The apparatus of claim 10 wherein the header information is obtained from

2   local I/O memory using the header descriptors.

1   13.   The apparatus of claim 10 wherein the data descriptors define at least the type

2   of data, the amount of data and the location of the data in the message.

1   14.   The apparatus of claim 10 wherein the NIC to receive the data from the host

2   comprises the NIC receiving the data from a host that is remotely disposed with the I/O

3   processor via at least one of a peripheral component interconnect (PCI) bus, an EISA

4   bus and a PCIX bus.

1   15.   The apparatus of claim 10 wherein the NIC to obtain the data from the host

2   comprises the NIC to obtain the data from the host via a direct memory access (DMA)

3   cycle.

1   16.   An article of manufacture comprising:

2   a machine-accessible medium including instructions that, when executed by a

3   machine, causes the machine to perform operations comprising

4   receiving a message, the message comprising header information and data

5   descriptors about data that is transmitted with the header information;

6   obtaining the data from a host, said host remotely disposed with respect to an

7   input/output (I/O) processor;

8   inserting the data in the message; and

9   sending the message toward its destination.

1   17.   The article of manufacture as in claim 16, wherein the instructions for receiving

2   a message comprising header information comprises further instructions for receiving

3   header descriptors for a transmission control protocol/internet protocol (TCP/IP)

4   header.

1   18.   The article of manufacture as in claim 17, wherein instructions for receiving a

2   message comprising header information includes further instructions for obtaining

3   header information from local I/O memory using the data descriptors.

1   19.   The article of manufacture as in claim 16, wherein said instructions for

2   receiving a message, the message comprising header information and data descriptors

3   about data that is transmitted comprises further instructions for the data descriptors

4   defining at least the type of data, the amount of data and the location of the data in the

5   message.

1   20.   The article of manufacture as in claim 16, wherein said instructions for

2   obtaining the data from a host comprises further instructions for obtaining data from a

3   host that is remotely disposed with the I/O processor via a peripheral component

4   interconnect (PCI) bus, an EISA bus and a PCIX bus.

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1   21.   The article of manufacture of claim 16 wherein said instructions for obtaining

2   the data from the host comprises further instructions for obtaining the data from the

3   host via a direct memory access (DMA) cycle.

1   22.   The article of manufacture of claim 16, wherein said instructions for receiving a

2   message comprises further instructions for any one of a network interface card, and an

3   intermediate software module locally disposed with respect to the I/O processor

4   receiving the message.

1   23.   An apparatus comprising:

2   a bus; and

3   a network interface card (NIC) coupled to the bus, said NIC to

4   receive a message, the message comprising header information and data

5   descriptors about data that is transmitted with the header information;

6   obtain the data from a host, said host remotely disposed on the bus with respect

7   to the NIC;

8   insert the data in the message; and

9   send the message toward its destination.

1   24.   The NIC of claim 23 wherein the header information comprises header

2   descriptors for a transmission control protocol/internet protocol (TCP/IP) header.

1   25.   The NIC of claim 23 wherein the header information is obtained from local I/O

2   memory using the header descriptors.

1   26.   The NIC of claim 23 wherein the data descriptors define at least the type of

2   data, the amount of data and the location of the data in the message.

1   27.   The NIC claim 23 wherein obtaining the data from the host comprises using the

2   data descriptors to obtain the data from a host that is remotely disposed with the I/O

3   processor via a bus.

1   28.   The NIC of claim 27 wherein the bus is at least one of a peripheral component

2   interconnect (PCI) bus, an EISA bus and a PCIX bus.

1   29.   The NIC of claim 23 wherein obtaining the data from the host comprises

2   obtaining the data from the host via a direct memory access (DMA) cycle.

1   30.   The NIC of claim 23 wherein obtaining the data from the host comprises

2   receiving the data via a PCI to PCI bridge.